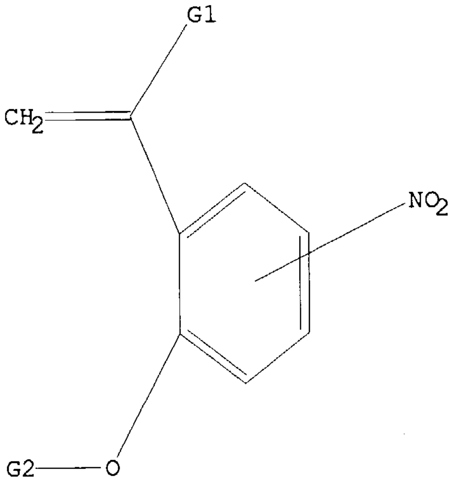
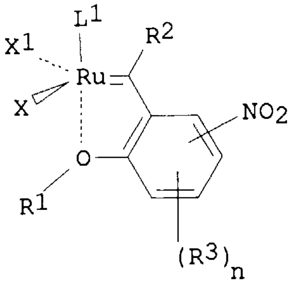
10/684,996

```
     (FILE 'HOME' ENTERED AT 15:22:17 ON 03 AUG 2004)

     FILE 'REGISTRY' ENTERED AT 15:22:32 ON 03 AUG 2004
L1              STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
```



```
G1 H,Me,Et,n-Pr,i-Pr,Ph
G2 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu


Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 15:23:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    359 TO ITERATE

100.0% PROCESSED     359 ITERATIONS                              0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:         6044 TO     8316
PROJECTED ANSWERS:               0 TO        0

L2             0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 15:23:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   7840 TO ITERATE

100.0% PROCESSED    7840 ITERATIONS                              4 ANSWERS
SEARCH TIME: 00.00.01

L3             4 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS                               SINCE FILE     TOTAL
                                                        ENTRY   SESSION
FULL ESTIMATED COST                                    155.42    155.63
```

```
FILE 'CAPLUS' ENTERED AT 15:23:13 ON 03 AUG 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 3 Aug 2004  VOL 141 ISS 6
FILE LAST UPDATED: 2 Aug 2004  (20040802/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s l3
L4          10 L3

=> d 1-10 bib abs

L4   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:354955  CAPLUS
DN   140:357511
TI   Preparation of ruthenium carbene complexes as (pre)catalysts for
     metathesis reactions
IN   Grela, Karol
PA   Boehringer Ingelheim International G.m.b.H., Germany
SO   PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2004035596        A1    20040429    WO 2003-EP11222        20031010
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     DE 20320324          U1    20040701    DE 2003-20320324       20031010
     US 2004127350        A1    20040701    US 2003-684996         20031014
PRAI PL 2002-356652       A     20021015
     US 2002-428072P      P     20021121
OS   CASREACT 140:357511; MARPAT 140:357511
GI
```

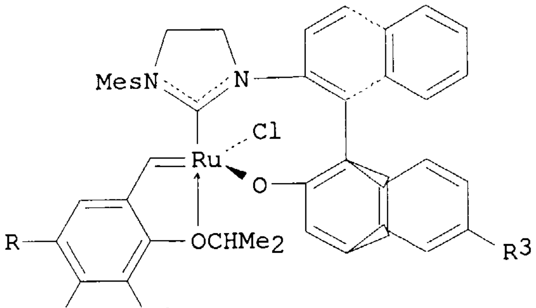


I

AB The invention relates to the preparation of new ruthenium carbene complexes I (L1 = neutral ligand; X, X1 = anionic ligands; R1 = C1-5 alkyl, C5-6 cycloalkyl; R2 = H, C1-20 alkyl, C2-20 alkenyl, C2-20 alkynyl, aryl; R3 = C1-6 alkyl, C1-6 alkoxy, C1-6 alkyl or alkoxy substituted aryl; n = 0-3). I are convenient (pre)catalysts for metathesis reactions and can be applied i.e. for ring-closing metathesis, cross metathesis or ene-yne metathesis reactions. Thus, CuCl-mediated reaction of 2-isopropoxy-5-nitrostyrene (preparation given) with Cl2Ru(L1)(PCy3)(:CH2Ph) (L1 = 1,3-bis(mesityl)imidazolidene) in CH2Cl2 gave 83% of title I (L1 = same, X, X1 = Cl, R1 = iPr, R2, (R3)n = H, and 4-substituted NO2), which was used as cross metathesis catalyst (example given).

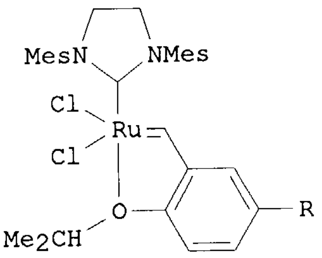
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:738568 CAPLUS
DN 140:4680
TI Chiral Ru-Based Complexes for Asymmetric Olefin Metathesis: Enhancement of Catalyst Activity through Steric and Electronic Modification
AU Van Veldhuizen, Joshua J.; Gillingham, Dennis G.; Garber, Steven B.; Kataoka, Osamu; Hoveyda, Amir H.
CS Department of Chemistry, Merkert Chemistry Center, Boston College, Chestnut Hill, MA, 02467, USA
SO Journal of the American Chemical Society (2003), 125(41), 12502-12508
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 140:4680
GI



I

```
AB   Design, synthesis, characterization, and catalytic activity of six
     enantiomerically pure Ru-based metathesis catalysts I (R = NO2, MeO, H,
     R1-R3 = H; R = R2 = R3 = H, R1 = OMe; R = R1 = H, R2 = Ph, R3 = H, CF3;
     R-R2 = H, R3 = CF3; Mes = 2,4,6-Me3C6H2) are disclosed.  The new chiral
     catalysts were prepared through steric and electronic alterations of the
     parent catalyst system.  The effect of structural modifications of chiral
     complex does not always correspond to those of the related achiral
     complexes.  Modified Ru complexes I (R = R1 = H; R2 = H, Ph; R3 = CF3)
     deliver reactivity levels that are more than 2 orders of magnitude higher
     than parent catalyst system.  Reactivity and phys. data are provided that
     shed light on the origin of activity differences.  Some members of the new
     generation of chiral Ru catalysts promote asym. ring-opening (AROM) and
     ring-closing (ARCM) metathesis that cannot be effected by the first
     generation chiral catalyst.
RE.CNT  53    THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 3 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:908270  CAPLUS
DN   138:254579
TI   A highly efficient ruthenium catalyst for metathesis reactions
AU   Grela, Karol; Harutyunyan, Syuzanna; Michrowska, Anna
CS   Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw,
     01-224, Pol.
SO   Angewandte Chemie, International Edition (2002), 41(21), 4038-4040
     CODEN: ACIEF5; ISSN: 1433-7851
PB   Wiley-VCH Verlag GmbH & Co. KGaA
DT   Journal
LA   English
OS   CASREACT 138:254579
GI
```



I

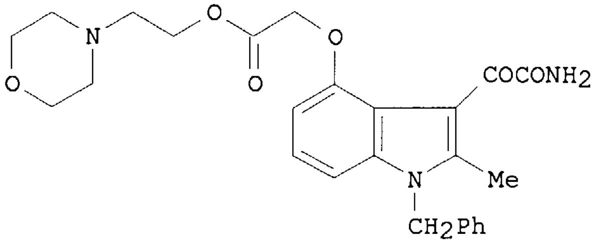
```
AB   The ruthenium alkylidene precatalyst I (R = NO2, Mes =
     2,4,6-trimethylphenyl), bearing an electron-withdrawing substituent, is
     more reactive than I (R = H, Br) in the cross metathesis (CM) of terminal
     alkenes, e.g., CH2:CHCH2CH2NTsCH2CH2CH:CH2.  The cross metathesis of
     terminal alkenes and α,β-unsatd. compds., e.g.,
     Me3CSiMe2O(CH2)4CH:CH2, can also be performed at room temperature  E.g., cross
     metathesis of Me3CSiMe2O(CH2)4CH:CH2 and MeCOCH:CH2 gave
     Me3CSiMe2O(CH2)4CH:CHCOMe (E:Z = 99:1).  I (R = NO2, Mes =
     2,4,6-trimethylphenyl) operates under very mild conditions and can be
     applied in various types of metathesis reactions (RCM, CM, enyne).
RE.CNT  33    THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 4 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:881454  CAPLUS
DN   139:307809
```

```
TI   Product subclass 4: palladium-alkene complexes
AU   Takacs, J. M.; Vayalakkada, S.
CS   Department of Chemistry, University of Nebraska, Lincoln, NE, 68588, USA
SO   Science of Synthesis (2002), 1, 319-387
     CODEN: SSCYJ9
PB   Georg Thieme Verlag
DT   Journal; General Review
LA   English
AB   A review on preparation and application of palladium-alkene complexes.
RE.CNT  291    THERE ARE 291 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 5 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:861062  CAPLUS
DN   139:197300
TI   Product class 13: indole and its derivatives
AU   Joule, J. A.
CS   Department of Chemistry, University of Manchester, Manchester, M13 9PL, UK
SO   Science of Synthesis (2001), 10, 361-652
     CODEN: SSCYJ9
PB   Georg Thieme Verlag
DT   Journal; General Review
LA   English
AB   A review of preparation of indoles and its derivs.  Covered reactions include
     cyclization, ring transformation, aromatization and substituent
     modifications.  Subclasses covered include 1H-indol-1-ols,
     1,3-dihydro-2H-indol-2-ones, and 1,2-dihydro-3H-indol-3-ones.
RE.CNT  1348   THERE ARE 1348 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 6 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:71855  CAPLUS
DN   136:134669
TI   Indoleoxoacetamides and tetrahydrocarbazoles as sPLA2 inhibitors in
     treating sepsis
IN   Loh, Andrew; Macias, William Louis; Skerjanec, Simona
PA   Eli Lilly and Company, USA
SO   PCT Int. Appl., 152 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND    DATE         APPLICATION NO.        DATE
     ---------------     ----    --------     --------------------   --------
PI   WO 2002005796        A2     20020124     WO 2001-US16509        20010629
     WO 2002005796        A3     20020906
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1303262           A2     20030423     EP 2001-952123         20010629
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001012460        A      20030722     BR 2001-12460          20010629
     JP 2004503586        T2     20040205     JP 2002-511729         20010629
     US 2004110825        A1     20040610     US 2003-332178         20030103
PRAI US 2000-218928P      P      20000714
```

US 2000-256398P P 20001218
WO 2001-US16509 W 20010629

OS MARPAT 136:134669

GI



I

AB Indoleoxoacetamides and tetrahydrocarbazoles were prepared for use as sPLA2 inhibitors in treating sepsis. Thus, 3-methoxy-2-methylaniline was N-tert.-butoxycarbonylated, lithiated at the Me group with sec-butyllithium and then treated with N-methoxy-N-methylacetamide, and cyclized with CF3CO2H to give 4-methoxy-2-methylindole. The latter compound was N-benzylated, demethylated, treated with BrCH2CO2Me, followed by ester hydrolysis and esterification with 4-(2-chloroethyl)morpholine hydrochloride to give the indole I. The results of clin. trials are reported.

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:27206 CAPLUS

DN 132:202623

TI 5,8-Dimethoxyharmalan: actions at 5-HT2A serotonin receptors

AU Hong, S.; Dukat, M.; Teitler, M.; Egan, C.; Dupre, A.; Herrick-Davis, K.; Glennon, R. A.

CS Department of Medicinal Chemistry, School of Pharmacy, Virginia Commonwealth University, Richmond, VA, 23298-0540, USA

SO Medicinal Chemistry Research (1999), 9(6), 374-388
CODEN: MCREEB; ISSN: 1054-2523

PB Birkhaeuser Boston

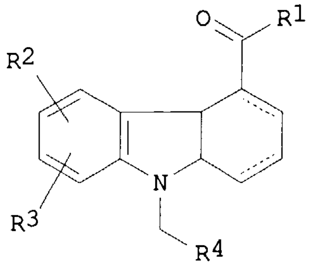
DT Journal

LA English

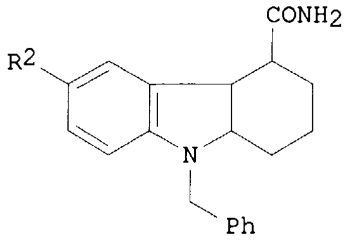
AB Certain β-carbolines bind at 5-HT2A and 5-HT2C serotonin receptors. To determine if these agents bind in a manner that more likely resembles the binding of N,N-dimethyltryptamine (DMT) or 1-(2,5-dimethoxyphenyl)-2-aminopropane (2,5-DMA), several multi-substituted β-carbolines were prepared and evaluated. Introduction of methoxy substituents at the 4- and 7-positions of DMT (i.e., 4,7-DiOMe DMT) decreased 5-HT2A affinity by half whereas the corresponding structural modification in the β-carboline series (i.e., 5,8-DMH) enhanced affinity by 6-fold. The results suggest that the mode of binding of the β-carbolines does not mimic that of DMT. Furthermore unlike 4,7-DiOMe DMT, 5,8-DMH was recognized by animals trained to discriminate the 5-HT2A agonist DOM from vehicle. However, in a PI hydrolysis assay, 5,8-DMH was found to lack agonist character. Although the β-carbolines might bind in a manner that mimics 2,5-DMA, 4-methylation of 2,5-DMA enhances affinity by 50-fold whereas the corresponding modification of 5,8-DMH enhanced affinity by only 2-fold; this result might be related to the spatial orientation of one of the methoxy groups. Differences in binding at 5-HT2C receptors were even less striking. At this time, the specific mode of binding of β-carbolines at 5-HT2A receptors remains unresolved.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4   ANSWER 8 OF 10  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   1998:293372  CAPLUS
DN   129:4575
TI   Preparation and formulation of 4-carbamoyltetrahydrocarbazolyloxyalkanoate
     s and analogs as secretory phospholipase A2 inhibitors
IN   Bach, Nicholas J.; Dillard, Robert D.; Draheim, Susan E.; Morin, John M.,
     Jr.
PA   Eli Lilly and Co., USA
SO   PCT Int. Appl., 143 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   WO 9818464           A1    19980507   WO 1997-US19183        19971023
         W:  AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH,
             HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL,
             TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN,
             ML, MR, NE, SN, TD, TG
     AU 9851494           A1    19980522   AU 1998-51494          19971023
     AU 734096            B2    20010607
     CN 1233176           A     19991027   CN 1997-198834         19971023
     BR 9713261           A     20000328   BR 1997-13261          19971023
     JP 2001503055        T2    20010306   JP 1998-520585         19971023
     EP 839806            A1    19980506   EP 1997-308645         19971029
     EP 839806            B1    20030709
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AT 244703            E     20030715   AT 1997-308645         19971029
     PT 839806            T     20031128   PT 1997-308645         19971029
     ES 2202560           T3    20040401   ES 1997-308645         19971029
     NO 9901831           A     19990621   NO 1999-1831           19990416
     KR 2000049210        A     20000725   KR 1999-703309         19990416
PRAI US 1996-29849P       P     19961030
     WO 1997-US19183      W     19971023
OS   MARPAT 129:4575
GI
```



I



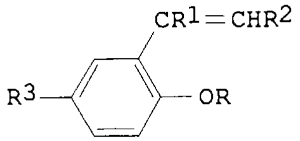
II

```
AB   Title compds. [e.g., I; R1 = NH2 or NHNH2; R2 = OH or O(CH2)mR5; R3 = H,
     alkoxy, (amino)alkyl, phenylalkyl, etc.; R4 = H, (cyclo)alkyl,
     (un)substituted Ph; R5 = H, CO2H, alkoxycarbonyl, Ph, etc.; m = 1-3;
     dashed lines = optional addnl. bonds] were prepared  Thus,
     4-(MeO)C6H4NHCH2Ph was cyclocondensed with Et 3-bromo-2-
     oxocyclohexanecarboxylate and the product converted in 3 steps to
```

carbazole II (R2 = OH) which was etherified by Br(CH2)3CO2Et to give, after saponification, II [R2 = O(CH2)4CO2H]. Data for biol. activity of I were given.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:559582 CAPLUS
DN 127:262577
TI Palladium-catalyzed synthesis of indoles by reductive N-heteroannulation of 2-nitrostyrenes
AU Soderberg, Bjorn C.; Shriver, James A.
CS Department Chemistry, West Virginia University, Morgantown, WV, 26506-6045, USA
SO Journal of Organic Chemistry (1997), 62(17), 5838-5845
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
AB A palladium-phosphine catalyzed reductive N-heteroannulation of 2-nitrostyrenes, e.g., 2-nitrostyrene, in the presence of carbon monoxide, producing indoles, e.g., indole, has been developed. Indoles were obtained, in moderate to excellent yield, from substituted 2-nitrostyrenes having either electron-withdrawing (NO2 and CO2Me) or electron-donating (Br, OH, Me, OMe, and OTf) substituents on the aromatic ring. Best results were obtained using palladium diacetate (6 mol %) together with triphenylphosphine (24 mol %) as the catalytic system, under 4 atm of carbon monoxide in acetonitrile at 70°C. Other palladium(II) and palladium(0) complexes also catalyze the reaction.

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:552469 CAPLUS
DN 105:152469
TI Intramolecular proton transfer in photohydration reactions
AU Kalanderopoulos, Peter; Yates, Keith
CS Dep. Chem., Univ. Toronto, Toronto, ON, M5S 1A1, Can.
SO Journal of the American Chemical Society (1986), 108(20), 6290-5
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
GI



I

AB The photohydration by intramol. proton transfer of alkenylbenzenes (I; R, R1, R2 = H, Me; R3 = H, NO2) was studied. The non-nitro-substituted o-hydroxystyrene photohydrate cleanly via the Markovnikov addition of water to afford the 1-arylethanols. The nitro-substituted o-hydroxystyrenes showed no dependence of product quantum yield with change in pH. The products isolated and identified in this case were the corresponding 2-(2-hydroxyphenyl)ethanols. Compds. with α substituents showed evidence of an increased interaction between the OH group and the π orbitals of the vinyl moiety. The absolute quantum yields for I (R-R3 = H; R, R2, R3 = H, R1 = Me) at pH 2 were 0.19 and 0.41, resp. The intra- and intermol. proton transfer rate consts. for these compds. were obtained and used to calculate the effective molarities, 10-2 and 2.6, resp.